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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte CHARLES CAMERON BRACKETT, and
MICHAEL RANDOLPH HARKAVY

Appeal 2009-005598
Application 10/749,524
Technology Center 2100

Decided: June 25, 2010

Before JOHN A. JEFFERY, JAY P. LUCAS, and
ST. JOHN COURTENAY III, *Administrative Patent Judges*.

COURTENAY, *Administrative Patent Judge*.

DECISION ON APPEAL

STATEMENT OF THE CASE

Appellants seek our review under 35 U.S.C. § 134 of the Examiner's final decision rejecting claims 1-29. We have jurisdiction over the appeal under 35 U.S.C. § 6(b). We Affirm-In-Part.

Invention

Appellants' invention is directed to facilitating management of image data sets to provide immediate access to the image sets within an automated medical environment. (Spec. 1).

Claim 1 is illustrative:

1. A computerized method for managing large studies transferred from at least one acquisition device to a study process server in order to transfer the studies to at least one review station, the computerized method comprising:
 - without having previously distributed the studies to a review station, sorting each received study into at least one appropriate working set and selecting at least one subset of the received studies from at least one working set; and
 - automatically distributing the at least one selected subset of studies to at least one review station such that the at least one selected subset of studies is available on demand for review by a physician.

The Examiner relies on the following prior art references as evidence of unpatentability:

Minyard	US 6,891,920 B1	May 10, 2005
Rothschild	US 2002/0016718 A1	Feb. 7, 2002
Fuller	US 2005/0050552 A1	Mar. 3, 2005

Appellants appeal the following rejections:

1. Claims 1-6, 8-13, 28, and 29 under 35 U.S.C. § 102(e) as anticipated by Minyard.
2. Claims 7 and 14 under 35 U.S.C. § 103(a) as unpatentable over Minyard and Fuller.

3. Claims 15-20 and 22-27 under 35 U.S.C. § 103(a) as unpatentable over Minyard and Rothschild.
4. Claim 21 under 35 U.S.C. § 103(a) as unpatentable over Minyard, Rothschild and Fuller.

APPELLANTS' CONTENTIONS

Appellants contend that determining a sequence for an image review session, as disclosed in Minyard, is not the same as selecting a subset of studies from a working set as recited in claim 1. (App. Br. 14; Reply Br. 5).

Appellants contend that Minyard fails to disclose “upon detecting at least one of the one or more selected user activities at a review station selected by a user, transferring additional studies to the selected review station.” (Claim 28; App. Br. 14).

Appellants contend that Minyard fails to disclose “without having previously distributed the studies to a review station, sorting each received study into at least one appropriate working set and selecting at least one subset of the received studies from at least one working set.” (App. Br. 9; claim 1).

Appellants contend that there is no apparent reason to combine Minyard and Fuller. (App. Br. 16).

Appellants contend that the cited references fail to teach or suggest monitoring a review station for a low buffer threshold and re-populating any review station reaching a low threshold with at least one additional set of studies. (App. Br. 16; claim 7).

Appellants contend that the Examiner has not provided any apparent reason for combining Minyard and Rothschild. (Reply Br. 6).

Appellants contend that the cited references fail to teach or suggest “populating the at least one review station with additional studies from at least one relevant working set upon detecting the login” (App. Br. 19; Claim 15).

ISSUES

Based upon our review of the administrative record, we have determined that the following issues are dispositive in this appeal:

Under § 102, did the Examiner err in determining that Minyard discloses “without having previously distributed the studies to a review station, sorting each received study into at least one appropriate working set and selecting at least one subset of the received studies from at least one working set?” (Claim 1).

Under § 102, did the Examiner err in determining that Minyard discloses “upon detecting at least one of the one or more selected user activities at a review station selected by a user, transferring additional studies to the selected review station?” (Claim 28).

Under § 103, did the Examiner err in combining Minyard and Fuller? (Claim 7).

Under § 103, did the Examiner err in determining that the cited references teach or suggest monitoring each review station for a low buffer threshold and re-populating any review station reaching the low buffer threshold with at least one additional subset of studies? (Claim 7).

Under § 103, did the Examiner err in combining Minyard and Rothschild? (Claim 15).

Under § 103, did the Examiner err in determining that the cited references teach or suggest “populating the at least one review station with additional studies from at least one relevant working set upon detecting the login?” (Claim 15).

FACTUAL FINDINGS

We adopt the Examiner’s findings in the Answer and Final Office Action as our own, except as to those findings that we expressly overturn or set aside in the Analysis that follows. We add the following factual findings:

1. Minyard discloses that “preprocessing” refers to processing of images before initial review of that image. (Abst. ll. 13-15).
2. Minyard discloses that image acquisition stations acquire the images and store the images in a database. (Col. 6, ll. 14-18).
3. Minyard discloses that an image repository 106 stores image information and a patient information database 108 stores associated patient information. The images of the repository 106 are indexed to the patient information of database 108 which is further organized in tables of cross-indexed data fields. (Col. 6, ll. 18-22 and 23-26).
4. Minyard describes that the database may be searched to obtain images for a given patient subset of images. (Col. 6, ll. 35-38 and 49-51).

5. Fuller is directed to data delivery after the amount of data in a queue falls below a threshold. (Abst. ll. 6-10).
6. Rothschild discloses that a data management system may be polled periodically or is polled upon occurrence of a predetermined triggering event, including a login event. (Para. [0085]).

ANALYSIS

§ 102 rejection of claims 28-29

We decide whether the Examiner erred in determining under § 102 that Minyard discloses “upon detecting at least one of the one or more selected user activities at a review station selected by a user, transferring additional studies to the selected review station,” as recited in independent claim 28.

We particularly note that in the § 103 rejection of claims 15 and 27 the Examiner appears to admit that this argued limitation (in commensurate form) is not disclosed by Minyard. (Ans. 11-12). We find this apparent contradiction in the record undermines the Examiner’s position.

Thus, for essentially the same reasons argued by Appellants, (App. Br. 14), we agree that Minyard fails to disclose or describe transferring additional studies upon a selected user activity. Based on this record, we find the Examiner erred in rejecting independent claim 28 under § 102. Accordingly, we reverse the Examiner’s anticipation rejection of claim 28 and claim 29 which falls therewith.

§ 102 rejection of claims 1-6 and 8-13

Based upon our review of the record, we find Appellants' argument unconvincing that Minyard does not disclose "without having previously distributed the studies to a review station, sorting each received study into at least one appropriate working set and selecting at least one subset of the received studies from at least one working set." (Claim 1).¹

During prosecution, "the PTO gives claims their 'broadest reasonable interpretation.'" *In re Bigio*, 381 F.3d 1320, 1324 (Fed. Cir. 2004) (quoting *In re Hyatt*, 211 F.3d 1367, 1372 (Fed. Cir. 2000)).

Here, we broadly but reasonably construe a "working set" to be all of the acquired images, and the acquired images of a particular patient to be a "subset" of the working set of acquired images.

In light of our construction, we find Minyard describes that when the images (i.e., "working set") are acquired by the image acquisition stations, the images are indexed and stored in a database (FF 2) according to the *organized patient data* (subset) (FF 3), *before* the image data is distributed to the review stations in response to a reviewer's query. (FF 4). The images are also preprocessed prior to review. (FF 1). Therefore, we find that Minyard describes sorting a working set into a subset prior to distribution to a review station as recited in claim 1.

In addition, we find that the subset of images (result of reviewer query) are *automatically* transferred and made available *upon demand*. (See FF 4).

¹ Based upon Appellants' arguments, we consider claim 1 as representative of claims 2-6 and 8-13. (App. Br. 8-13). *See* 37 C.F.R. § 41.37(c)(vii).

Based on this record, we find that the Examiner did not err in rejecting representative claim 1. Accordingly, we affirm the Examiner’s anticipation rejection of claim 1 and claims 2-6 which fall therewith.

We further note that Appellants’ arguments regarding claims 8-13 are essentially the same as those discussed above regarding claims 1-6. (App. Br. 11-13). Accordingly, we sustain the Examiner’s anticipation rejection of claims 8-13 for the same reasons discussed *supra* regarding claim 1.

§ 103 rejection of dependent claims 7 and 14

We decide whether the Examiner erred in combining Minyard and Fuller. Appellants contend that the “Office Action cannot rely on the benefit of the combination without first supporting the motivation to make the combination to providing any apparent reasons to combine the references” (App. Br. 17). Appellants also contend that Fuller is not analogous art. (App. Br. 18)

“[A]ny need or problem known in the field of endeavor at the time of invention and addressed by the patent can provide a reason for combining the elements in the manner claimed.” *In re ICON Health and Fitness Inc.*, 496 F.3d 1374, 1380 (Fed. Cir. 2007) (quoting *KSR Int’l Co. v. Teleflex, Inc.*, 127 S. Ct. 1727, 1742 (2007)).

With regards to Appellants’ first contention, we find the Examiner did provide adequate support for the combination. (Ans. 10). The Examiner specifically cites paragraph [0004] of Fuller and the Abstract of Minyard to support the Examiner’s proffered motivation to combine the references. (Ans. 10).

With regards to Appellants' second contention, we find that Fuller and Minyard are in the same field of endeavor for the same reasons stated by the Examiner. (Ans. 24). In addition, we find that Fuller is reasonably pertinent to the particular problem (data delivery) being solved. As noted by the Examiner, Fuller is directed to immediate data delivery. (FF 5). Accordingly, we find the Examiner did not err in combining Minyard and Fuller.

We next decide whether the Examiner erred in determining that the cited references teach or suggest the limitations recited in claim 7: "further comprising monitoring each review station for a low buffer threshold and re-populating any review station reaching the low buffer threshold with at least one addition subset of studies."²

Based upon our review of the record, we agree with and adopt the Examiner's findings regarding claim 7. (Ans. 24). The Examiner relies upon Fuller to teach monitoring a threshold and adding (re-populating) more data if the amount of data in the queue is too low. (See Ans. 24 citing Fuller at para. [0019]). We do not find Appellants' argument that Fuller is not concerned with transferring data over a network to be persuasive. (Reply Br. 8). We find that Minyard teaches transferring images from an acquisition device to a review station, e.g., transferring data over a network. (FF 2 and 4). We note that the Examiner's rejection is based upon the combination of references.

² Based upon Appellants' arguments, we consider claim 7 as representative of claim 14. (App. Br. 15). *See* 37 C.F.R. § 41.37(c)(vii).

For at least these reasons, we find the Examiner did not err in rejecting claim 7. Accordingly, we affirm the Examiner’s § 103 rejection of claim 7 and claim 14 which falls therewith.

§ 103 rejection of claims 15-20, and 22-27

We decide whether the Examiner erred in combining Minyard and Rothschild. Appellants contend that the Examiner’s motivation to combine the references is conclusory and is the result of hindsight reasoning. (Reply Br. 7).

Though we are fully cognizant of the hindsight bias that often plagues determinations of obviousness, *Graham v. John Deere Co.*, 383 U.S. 1, 36 (1966), we are also mindful that “[t]he combination of familiar elements according to known methods is likely to be obvious when it does no more than yield predictable results,” *KSR Int’l Co. v. Teleflex Inc.*, 550 U.S. 398, 416 (2007). “[W]hen a patent ‘simply arranges old elements with each performing the same function it had been known to perform’ and yields no more than one would expect from such an arrangement, the combination is obvious.” *KSR Int’l Co. v. Teleflex, Inc.*, 550 U.S. 398, 417 (2007) (quoting *Sakraida v. Ag Pro, Inc.*, 425 U.S. 273, 282 (1976)).

This reasoning is applicable here. We find that the Examiner’s motivation to combine Minyard and Rothschild is an arrangement of familiar elements. (See Ans. 11-12). Moreover, Appellants’ combinability argument (Minyard and Rothschild) was first presented in the Reply Brief (page 6) and is subject to waiver. *See Ex parte Borden*, 93 USPQ2d 1473,

1474 (BPAI 2010) (informative) (“[T]he reply brief [is not] an opportunity to make arguments that could have been made in the principal brief on appeal to rebut the Examiner’s rejections, but were not.”).

Therefore, we find unpersuasive Appellants’ contentions regarding the Examiner’s proffered motivation.

We next decide whether the Examiner erred in determining that the cited combination of Minyard and Rothschild teaches or suggests “populating the at least one review station with additional studies from at least one relevant working set upon detecting the login,” as recited in claim 15.³

Appellants contend that Rothschild either pushes images to a remote location as the images are received or waits for a triggering event to push the images to the remote location and not a combination of both. (App. Br. 19)(underline in original).

Based on Appellants recognition that Rothschild describes *pushing the images to a remote location or waiting for a triggering event to push images* (in the alternative), we conclude that Rothschild’s detection of a login (FF 6), when combined with the teachings of Minyard, would have rendered the limitation in question obvious. We take particular note that Rothschild teaches a workstation that is populated with additional data (studies) after detection by the polling system of a triggering event (such as login). (FF 6).

³ Based on Appellants’ arguments, we consider claim 15 as representative of claims 16-20, and 22-27. (App. Br. 18 and 22).). See 37 C.F.R. § 41.37(c)(vii).

Thus, populating a workstation with additional data was clearly known in the art. As discussed above regarding claim 1, Minyard discloses that a subset (request of a query) is sent to a workstation upon request.

Given these teachings, we find the Examiner did not err in rejecting representative independent claim 15 under § 103. Accordingly, we affirm the Examiner's obviousness 103 rejection of claim 15, and claims 16-20 and 22-26 which fall therewith.

Dependent claim 21

Appellants contentions regarding claim 21 are based on arguments previously presented for independent claim 15, which we did not find persuasive. (App. Br. 22). We have addressed the combinability of the cited references *supra*. Thus, we find the Examiner did not err in rejecting claim 21 for the reasons discussed *supra* regarding independent claim 15 (from which claim 21 depends).

DECISION

We reverse the Examiner's §102(e) rejection of claims 28 and 29.

We affirm the Examiner's § 102(e) rejection of claims 1-6 and 8-13.

We affirm the Examiner's § 103 rejections of claims 7 and 14-27.

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No time period for taking any subsequent action in connection with this appeal may be extended under 37 C.F.R. § 1.136(a). *See* 37 C.F.R. § 1.136(a)(1)(2009).

ORDER
AFFIRMED-IN-PART

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